

GRAPHICS RECEIVER --- PRINTER

GRAPHICS RECEIVER/PRINTER

*developed by UNITED AIRCRAFT CORPORATE SYSTEMS CENTER**

DESCRIPTION

The **Graphics Receiver/Printer** is a device for high-speed conversion of a wide variety of digital inputs to printed data in the form of alphanumerics and line drawings.

CAPABILITIES

The **Graphics Receiver/Printer** operates as a real time communications teleprinter and/or plotter, which permits an increase in transmission speed over available printers or plotters, and a greater than order of magnitude improvement over standard facsimile speeds. This high speed is achieved with no increase in communication bandwidth through the utilization of highly efficient digital transmission coding. In the plotting mode, prerecorded backgrounds may be superimposed automatically on graphic and/or alphanumeric information. Graphic data is reproduced as smooth curves without the segmented or angular characteristics of most available systems. The entire alphanumeric symbol vocabulary is available for both the plotting and printing modes. The output of the **Graphics Receiver/Printer** is a permanent hard copy of high contrast produced by a wholly dry process.

OPERATION

Information from facsimile or other digital communications circuits is interpreted by the control logic as functional commands and output data. The graphics generator converts

output data to smoothed analogy x-y voltages for presentation as plotted lines. These x-y voltages control the tracing of the desired line plot in the cathode ray tube image generator. Alphanumeric data is similarly converted to x-y voltages by the character generator and then converted to an optical image by the image generator. A background can be selected by the incoming digital data for superposition on the final copy. A dry electrostatic photographic process records the optical images in the hard copy processor.

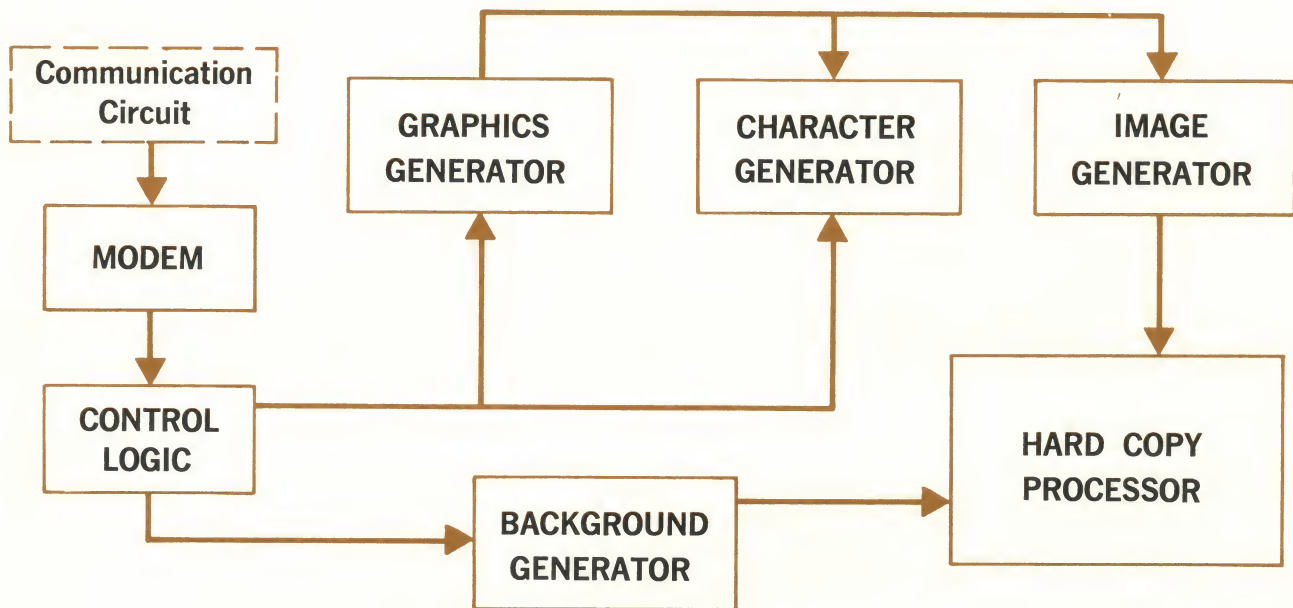
APPLICATIONS

The **Graphics Receiver/Printer** provides real time reproduction of digital inputs in the form of alphanumeric and/or line drawings. The availability of such information for immediate interpretation and evaluation in non-perishable format will significantly improve man's decision-making process and the total performance of complex information systems involving:

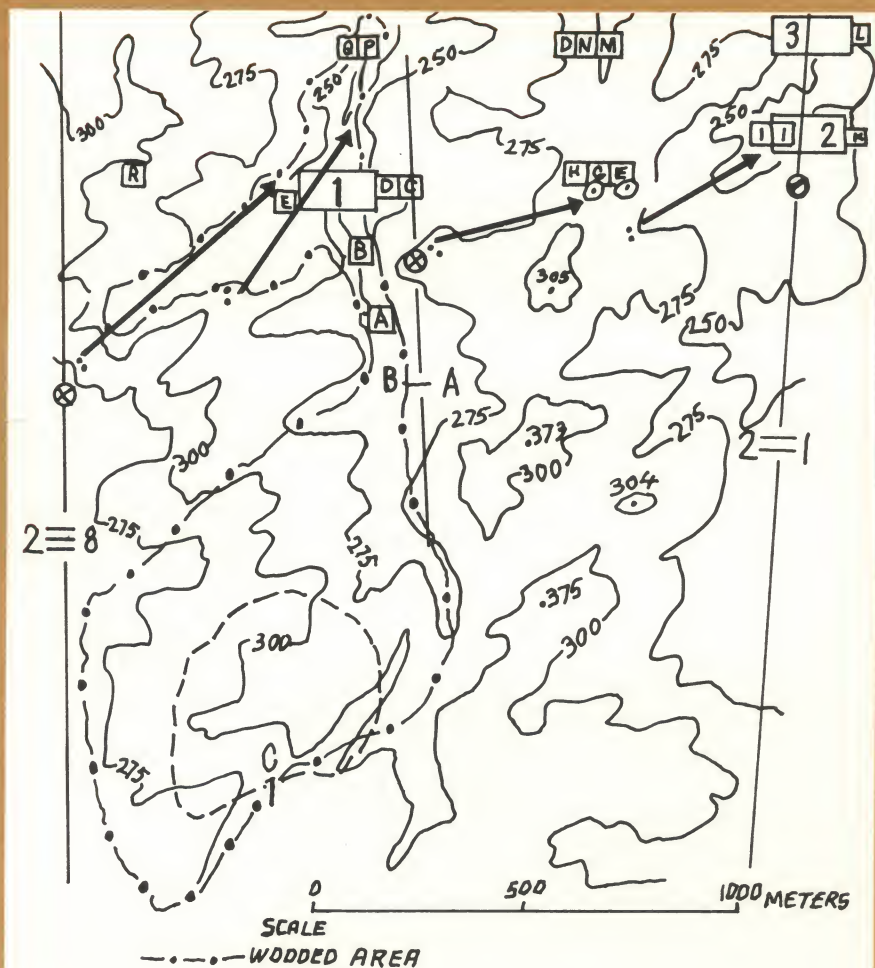
- **Military Intelligence**
- **Battle Orders**
- **Production Control**
- **Fallout and Chemical Cloud Patterns**
- **Weather Observation and Forecasting**
- **Inventory Control**
- **Command & Control**
- **Traffic Control**
- **Logistic Planning & Control**
- **Target/Weapon Status**

*under AFSC sponsorship

OPERATION



**TYPICAL OUTPUT
SITUATION MAP**



GRAPHICS RECEIVER / PRINTER SPECIFICATIONS

• OPERATIONAL

INPUT

- Baudot or ASC11 Code at 1,200 to 2,400 bits/second
- EIA standard interface (RS-232-A)
- Standard 3kc voice bandwidth

OUTPUT

- High contrast black image or durable paper of archival quality
- 12-inch-wide roll stock (18 inch width also available)

SPEED

- to 3,000 words/minute
- to 2,000 inches of line drawing/minute
- 120 to 960 scans per minute facsimile (optional)

PRECISION

- Graphical data position held to $\pm 1\%$

SYMBOL VOCABULARY

- 64 alphanumeric symbols

BACKGROUNDS

Prerecorded backgrounds determined by user requirements

• PHYSICAL

SIZE

- Height, 56 inches
- Width, 30 inches
- Depth, 60 inches

ENVIRONMENT

- 60°-100°F ambient, 20%-80% relative humidity

POWER

- 220 volts, 60 cps; 30 amps

• MAINTENANCE

CONSTRUCTION

- Modular • Plug-in

TEST

- Self-test circuits built in

***For Additional Information, contact Mr. R. Stuart
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